Expert Workshop “low water and its impact on Rhine navigation” 18.1.2023

What has been learnt since 2018?
Chapter 0
What has been learnt since 2018?

Chapter 1
Economic impact

Chapter 2
Needs of the sector

Chapter 3
Water scarcity and drought – what society needs
00. What has been learnt since 2018?

- Economic impact
- Needs of the sector
- Water scarcity and drought – what society needs
01. Economic impact

- Huge costs
- Lack of reliability
- Reverse modal shift
The interruption in the logistics chains of the 2018 low water period caused considerable economic losses. For Germany this materialised in a decrease of its industrial production by 5 billion Euros (source: CCNR Market observation – Annual Report 2019)

Figure 11: Fleet capacity vs water levels at Kaub (Source: Rhenus Logistics)
01. costs

Economic and financial impact of the 2018 low water period (source: Economische impact laagwater, Erasmus UTP)

<table>
<thead>
<tr>
<th>Financial impact inland shipping sector</th>
<th>Nederland</th>
<th>Duitsland</th>
<th>Totaal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net revenue</td>
<td>+ 378 million euro</td>
<td>+ 95 million euro</td>
<td>+ 473 million euro</td>
</tr>
<tr>
<td>Additional costs</td>
<td>- 302 million euro</td>
<td>- 76 million euro</td>
<td>- 378 million euro</td>
</tr>
<tr>
<td>Net profit</td>
<td>+ 76 million euro</td>
<td>+ 19 million euro</td>
<td>+ 95 million euro</td>
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<table>
<thead>
<tr>
<th>Financial impact shippers</th>
<th>Nederland</th>
<th>Duitsland</th>
<th>Totaal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport costs</td>
<td>- 245 million euro</td>
<td>- 243 million euro</td>
<td>- 488 million euro</td>
</tr>
<tr>
<td>Production reduction</td>
<td>- 60 million euro</td>
<td>- 2.1 billion euro</td>
<td>- 2.2 billion euro</td>
</tr>
<tr>
<td>Strategic stocks</td>
<td>- 66 million euro</td>
<td>- 65 million euro</td>
<td>- 131 million euro</td>
</tr>
<tr>
<td>Total negative impact</td>
<td>- 371 million euro</td>
<td>- 2.4 billion euro</td>
<td>- 2.8 billion euro</td>
</tr>
</tbody>
</table>

| Total financial impact                 | - 295 million euro | - 2.4 billion euro | - 2.7 billion euro |
The economic and financial impact of the low water period in 2022 is expected at a comparable level.

Figure 10: Amount of ships required to transport a fix amount of cargo (Source: CONTARGO)
01. Lack of reliability

- Disruption of IWT activities
- Restricted loads to be carried
- Increased sailing time
- Increased costs of carriage
01. Reverse modal shift

- Re-routing via other modes in case of low water
- Difficult to regain volumes after such periods
- Undermining the overall EU policies regarding reduction of GHG and increasing modal share of IWT
02. Needs of the sector

- Reliability
- Sufficient investment in infrastructure
- TEN-T revision
02. Reliability

- IWT needs a reliable, safe, cost effective and climate resilient infrastructure network.
- River Rhine counts for 70% of IWT carried on EU waterways
- Societies and major industries in Europe depend on a seamless supply of their goods via waterways, while tourism on waterways is of increasing economic importance
02. Reliability

Aktionsplan „Niedrigwasser Rhein“

Informationsbereitstellung
1. Wasserstandsprognose verbessern
2. DAS-Basisdienst Klima & Wasser
3. Aktuelle Tiefeninformationen bereitstellen

Transport & Logistik
4. Transportkonzepte anpassen & Technik optimieren

Infrastruktur
5. „Abladeoptimierung am Mittel- & Niederrhein“ beschleunigen
6. Beschleunigte Umsetzung der Abladeoptimierung am Mittelrhein durch Maßnahmengesetz

Langfristige Lösungsansätze
7. Wasserbauliche & wasserwirtschaftliche Optionen untersuchen
8. Gesellschaftlicher Dialog
02. Sufficient investment in infrastructure

- Modal shift high on political sustainability agenda

- Overall, from 2009 to 2017, the EU saw a 15% decline in infrastructure investment activities (as a share of GDP)*)

- Inland waterways infrastructure needs, including inland ports amount around EUR 47 billion between 2021 & 2027. Current CEF support is around EUR 1.8 billion for IWT.*

Source: Staff working document to Sustainable and Smart Mobility Strategy.
02. TEN-T revision

- Good Navigation Status (GNS)
- Clear and ambitious parameters for waterways
- Non-deterioration
- More investment in waterway infrastructure
- Maintenance
03. Water scarcity and droughts - what society needs

- Drought and water scarcity have become more evident and impactful across the EU in the past decades
- Right balance between ecological and economic interests
- IWT must be properly integrated in future drought management systems in all relevant Member States.
- Strong transboundary cooperation between Member States
- multi-disciplinary and multi-sector approach that facilitates co-benefits measures
Many Thanks for your attention